h15h7 S/136/62/000/010/004/004 E194/E435

//. 39012 AUTHORS:

Polishchuk, V.P., Tsin, M.R.

TITLE:

Electromagnetic pumping of non-metallic melts

PERIODICAL: Tsvetnyye metally, no.10, 1962, 82-83

For pumping molten salts, which are used in non-ferrous metallurgy, mechanical pumps cannot be used due to the high temperatures involved; electromagnetic pumps cannot be used because the molten salts have inadequate electrical conductivity; airlift pumps are used but are unsatisfactory. The Institut liteynogo proizvodstva AN UkrSSR (Institute of Foundry Production UkrSSR) has developed a pump for this purpose in which molten metal driven by an electromagnetic pump acts as a piston to drive the molten salts. With the pump inactive the molten metal fills the bottom of the salt bath and the base of the annular pump nearly to the level of the molten salt inlet port. When the pump is switched on the rising metal first cuts off the salt inlet port and then drives the molten salt in the pump body upwards. Double acting pumps can be used having two pump bodies connected to a common reservoir of molten metal so that one body is pumping whilst the Card 1/2

EPF(n)-2/EPR/EPA(s)-2/EWT(1)/EWT(m)/EPA(bb)-2/T-2/EWP(b)/EWP(t)ACCISSION NR: AP5001336 Pt-10/Pu-4 IJP(c) s/0128/64/000/012/0022/0022 Polishchuk, V. P. (Candidate of technical sciences); Yakovlev, V. S. AUTIOR: (Engineer) TITIE: Channelless magnetodynamic immersion pump for liquid metals Liteynoye proizvodstvo, no. 12, 1964, 22 TOPIC TAGS: magnetodynamic pump, electromagnetic pump, magnetodynamic pouring, aluminum alloy casting, zinc alloy casting, magnesium alloy casting, liquid metal ABST LACT: A magnetodynamic pump developed at the Institut problem lit'ya AN USSR (Casting problems institute, AN UkrSSR) is illustrated and described in detail. The jump operates with an applied voltage of 220 V and an induced voltage in the liquid metal of 380 V. It may be used for zinc, aluminum and magnesium alloys at working temperatures of 650-680C. An advantage of this pump is that the level of metal in the furnace does not affect the size of the batch delivered since the pump drops as the level goes down. Because of its simplicity, this pump rivals known electromagnetic batchers. It is currently being introduced at the Kiyevskiy zavod nestandartnogo tekhnologicheskogo oborudovaniya (Kiev nonstandard technical Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001341810014-8"

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equi me	nt factory). Orig. a	rt. has: 3 figures.		
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ACCESSION NR: AP5016662

UR/0382/65/000/002/0139/0144 669.16 : 538.4

AUTHOF: Aronova, N. R.; Folishchuk, V. P.; Tsin, M. R.

48

TITLE: Electromagnetic mixing of liquid metals by pulsed fields

.

SOURCE: Magnitnaya gidrodinamika, no. 2, 1965, 139-144

TOPIC TAGS: liquid metal, electromagnetic mixing, MHD flow

ABSTRACT: The Institute of Foundry Problems AN UkrSSR has reviewed the methods of liquid metal mixing and has concentrated its effort on the study of utilization of electromagnetic forces for this purpose. Simpler variants of these devices have been studied extensively and the conclusions are reported. Turbulent mixing is achieved by use of E- and 0-type electromagnets. The electromagnetic forces lead to very strong mixing especially when the metal trough is not completely filled. Transparent channels were used to observe the behavior of a test metal (mercury) in the mixing chamber. The efficiency of energy transfer reaches about 90% and does not depend strongly on the wall thickness, thus making this method suitable for high temperature operation. Experiments with single phase mixers did not

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ACCESSION NR: AP5016662

permit any wide variation of parameters. A new magnetodynamic device has been constructed and studied to mix mercury and water or powder-like substances. Various mixing regimes were observed by changing relative phases between the mixer magnets. The main advantages of the new system, which is suitable for admixing any material, are the small electric losses. Heat losses during the flow through the mixer are compensated and some additional heating may occur due to currents flowing in the mixed metals. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 07Jan65

ENCL: 00

SUB CODE: MM. ME

NO REF SOV: 002

OTHER: 000

Technology of aluminum nitride production. Zhur. prikl. khim.
36 no.5:1142-1143 My '63. (MIRA 16:8)

(Aluminum nitrides)

ACCESSION NR: AP4043769 S/0080/64/037/008/1828/1830

AUTHOR: Dubovik, T. V.; Polishchuk, V.S.; Samsonov, G. V.

TITLE: Derivation of magnesium nitride

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 8, 1964, 1828-1830

TOPIC TAGS: magnesium, nitride, nitration agent, ammonia, nitrogen

ABSTFACT: The authors conduct a technological study of conditions for obtaining magnesium nitride using nitrogen and ammonia as nitration agents. The initial material consisted of magnesium chips measuring 0.1-0.2 mm. Nitration took place in porcelain vessels placed in a quartz reactor. Nitration was conducted at temperatures from 200 to 1000°C over a period of 15 minutes to 4 hours for each temperature. The results of the experiment showed that nitration begins during the distillation of nitrogen through magnesium over a period of 30 minutes at 250°C. Nitration reaches its peak at 800°C over a period of 4 hours. At higher temperatures the nitrogen content drops sharply. The authors concluded that attempts to nitrate magnesium with ammonia have yielded much poorer results, which is apparently related to the fact that magnesium nitride converts easily into hydride and

Card 1/2

L 1)115-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/WH/HWI-2/JG

ACCISSION NR: AP3002706

5/0080/63/036/005/1142/1143

AUTIOR: Polishchuk, V. S.

58 57

TITE: Concerning the preparation of aluminum nitride

SOURCE: Zhurmal prikladnoy khimii, v. 36, no. 5, 1963, 1142-1143

TOPIC TAGS: All, technical-grade All, preparation, nitridation

ARSTRACT: Nitridation of Al powder to form Aln, a compound which exhibits good reiractory, abrasive, and dielectric properties, was accomplished for the first time by a one-step high-temperature process instead of the conventional two-step pricess. A 100-g charge, consisting of PP-1 aluminum powder and 30 to 70% of prisynthesized Aln (32.2% N), was nitrided in a molybdenum boat with nitrogen at prisynthesized Aln (32.2% N), was nitrided in a molybdenum boat with nitrogen at 900°C for 2.5 hr in a nickel reactor (8 hr required to heat to 900°C). The prisence of Aln in the charge was to prevent excessive sintering and to increase the nitridation surface area. A 30% Aln content was sufficient to produce a uniform, porous, and easily powdered technical-grade Aln. Efforts to increase the yield by decreasing the Aln content of the charge produced a dense, hard product with low nitrogen content. Experiments with 800-g 30%-Aln charges treated at 1200°C for 1 hr also produced technical-grade Aln with satisfactory Cord1/2

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ACCUSSION NR: AP3002706

nittiogen content. No apparent damage to the boat or reactor was observed after four cycles of nitridation at 1200c. The new method makes it possible in one ster to prepare technical grade Aln of satisfactory composition but with a smaller technical yield, owing to the recycled 30% AlN holdup, than can be obtained from the two-step process. "The author expresses gratitude to G. V. Samsonov for his suggestions and help in the present study." Orig. art. has: 2 tables.

ASSCCIATION: none

SUBMITTED: 17Aug62

DATE ACQ: 24Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 002

OTHER: 001

Card2/2

EPF(n)-2/EMP(k)/EMP(z)/EWT(m)/EMP(i)/EWG(m)/EWP(b)/EWP(e)/EWP(t) Pf-4/ Ps-L Pu-L IJP(c) AT/WH/WN/JD/JO ACCESSION NR: AP5018279 UR/0226/65/000/007/0100/0107 42 AUTHOR: Polishchuk, V.S. TITLE: Experience in the preparation of refractory compounds under industrial conditions SOURCE: Poroshkovaya metallurgiya, no. 7, 1965, 100-107 TOPIC TAGS: carbide, nitride, boride, sulfide, refractory compound ABSTRACT: The author reviews the experience of the Donets Chemical Reagent Plant n the production of refractory materials. In the production of carbides and borides, wet granulation of the charge has been adopted to replace the dry pressing user earlier. Dwing to the high gas permeability of the charge, the carbides and borides obtained rom a charge with granules 10 mm in average diameter form a product with homogeneous Muality, and the two stages usually involved in the preparation of titanium carbide and tirconium carbide can be reduced to a single stage. By utilizing the high mobility of he granulated charge, an automatic, semicontinuous, vacuum electric furnace has been leveloped for the synthesis of metal carbides. The output of devices producing metal nitrides by heating metal powders in nitrogen is very limited because of marked sintering, and in some cases fusion, of the metal. The charge can be considerably 1/2

28.4	1075-65 ACCESSION NR: AP5018279	9			I
	increased, particularly in the (up to 4-5 kg), by adding 30-nitrided. A quartz reactor powders has been developed than that of a batch-operated 3 formulas and 4 tables.	he preparation of ma -40% of a nitride obt for the continuous pi	amed earner of reparation of me itout is approxim	tal nitrides frately 50 time	om metal s greater
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BRAGINSKIY, L.P.; POLISHCHUK, V.V.

First Conference of the All-Union Hydrobiological Society in the Ukrainian S.S.R. Gidrobiol. zhur. 1 no.1:80 '65.

(MIRA 18:5)

GURVICH, V.V. [Hurvych, V.V.]; POLISHCHUK, V.V.

Materials for studying micro- and macrobenthos as a single bottom cenosis. Dop. AN URSR no.7:939-941 \*65.

(MIRA 18:8)

1. Institut gidrobiologii AN UkrSSR.

UMANSKIY, N.A., inzh.; POLISHCHUK, V.V., inzh.

Prodynamic attachment to a wool carder. Khim.mashinostr. no.3:

My-Je '63.

(MIRA 16:11)

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FOLISHCHUK, V.V.; CHERNOUSOVA, V.M.; SHTITEL'MAN, Ye.P.

Hydrobiological and hydrochemical characteristics of the Shostka

Hydrobiological and hydrochemical characteristics of the bhostal River and the effect of its pollution on the Desna River. Vop. (MIRA 16:6) ekol. 5:173-174 '62.

1. Institut gidrobiologii AN UkrSSR, Kiyev.

(Shostka River (Ukraine)--Freshwater fauna)

(Desna River--Freshwater fauna)

(Water--Pollution)

DANILOVA, L. Ye. [Danylova, L.IE.]; POLISHCHUK, V.V.

Plankton of Lake Sitovoye in the Gel'myazov region, Poltava Province. Visnyk Kyiv. un. no. 5. Ser. biol. no.1: 105-114 162. (MIRA 16:5)

(SITOVOYE, LAKE (POLTAVA PROVINCE)-PLANKTON)

CONTROL OF THE PROPERTY OF THE

POLISHCHUK, V.V.; SHERSTYUK, V.V.

Materials on the food of perch (Perca fluviatilis) in the

middle reaches of the Dnieper River. Dop. AN URSR no.114-117 62. (MIRA 15:2)

1. Institut gidrobiologii AN USSR. Predstavleno akademikom AN USSR A.P.Markevichem [Markevych, O.P.]
(Dnieper River—Perch)
(Fishes—Food)

POLISHCHUK, YA.

Athletiis - Caucasus, Northern

In the cossack village of Dinsk Mol. kolkh. 19 no. 5 May 1952

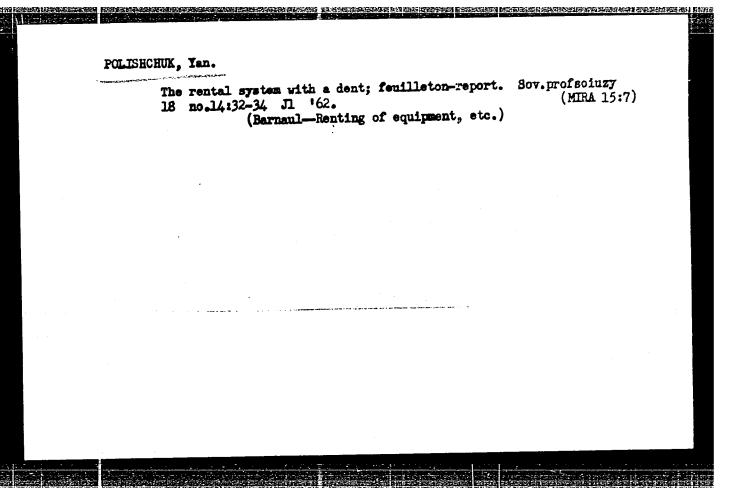
Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

POLISHCHUK, YA.

Horsemanship

Don horsenen. Mol. kolkh. 19 Nc. 6, 1952

Monthly List of Russian Accessions, Library of Congress, August 1952, Unclassified



GRUNSKIY, F.; DVORKIN, L; KUKSA, I. starshiy master; POLISHCHUK, Ya.

CHEKHOVSKOY, M.

Information. Prof.-tekh.obr. 15 no.1:32-33 Ja '58. (MIRA 11:1)

1. Direktor blagodarnenskogo uchilishcha mekhanizatsii sel'skogo khozyaystva No.3 (for Grunskiy). 2. Nachal'nik otdela uchilishch i shkol Permskogo oblastnogo upravleniya trudovykh rezervov (for Dvorkin). 3. Zamestitel' direktora tekhnicheskogo uchilishcha No.9 (for Polishchuk). 4. Baku, Dom kul'tury trudovykh rezervov (for Chekhovskoy)

(Technical education)

RASIN. Semen Davidovich, doktor med.nauk; POLISHCHUK, Y.A., doktor med.nauk.

[Alcoholism and psychoneuroses] Alkoholism i nervove-psykhichni khvoroby. Kyiv. 1959. 37 p. (MIRA 12:7)

(ALCOHOLISM)

ACCE	4-65 ENT(d)/ENT(m)/ENP(v)/ENP(t)/ENP(k)/ENP(h)/ENP(b)/ENP(1) Pf-4 JD UR/0137/65/000/003/B016/B016	
SOUR		
	DR: Gitgarts, D. A.: Polishchuk Vo A v.,	
TITLE	: Automation of the control system for electrical conditions in induction	
CITED	SOURCE: Elektrotermiya, Nauchno-tekhn, sb., vyp. 38, 1964, 11-12	
ropic trol, p curren	TAGS: induction melting, electric furnace, induction furnace, power con- ower equipment, power transformer, power consumption, high frequency , automatic control system, automatic regulation, current control, voltage	
rrans ind non he mel	LATION: Induction melting electric furnaces are used for melting ferrous ferrous metals and are fed by single phase step-up transformers. During ing period, constant correction of conditions is required to prevent over-	
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GITGARTS, D.A., inzh.; POLISHCHUK, Ya.A., inzh.; KOLGANOV, Ye.P., inzh.

Automatic regulator for induction smelting systems using commercial frequencies. Elektrotekhnika 36 no.5:30-32 My '65.

(MIRA 18:5)

GITGARTS, Dmitriy Abramovich; FOLISHCHUK, Yanina Aleksandrovna; EDEMSKIY, V.M., red.

[Automatic control of induction-heated melting furnaces] Avtomaticheskoe regulirovanie induktsionnykh plavil'nykh ustanovok. Moskva, Energiia, 1965. 78 p. (Biblioteka elektrotermista, no.24) (MIRA 18:7)

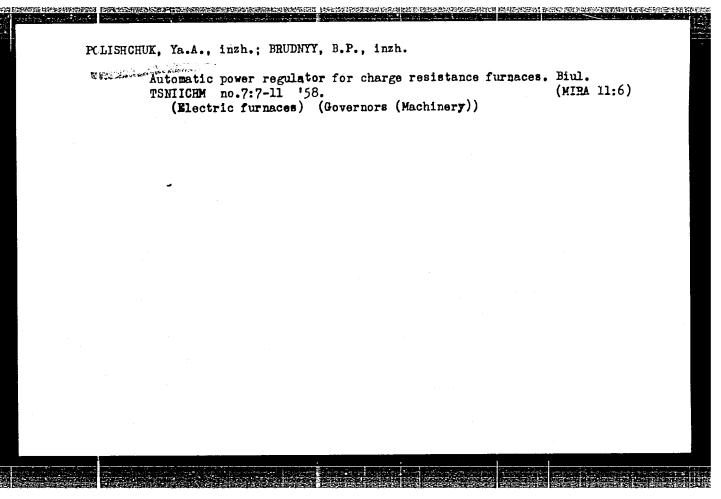
POLISHCHUK, Yan Azerovich; AMTIPINA, L., red.; KONYASHINA, A., tekhn.red.

[For each and every one] Dlia vsekh i dlia kezhdogo. Moskva,
Izd-vo Tak ViksM "Molodaia gvardiia," 1959. 117 p.

(Mira 13:12)

(Russia--Economic conditions)

(Russia--Social conditions)



5/110/60/000/012/003/004 E041/E421

Polishchuk Ya.A., Engineer, Treyzon, Z.L., Engineer, AUTHORS:

Kalinin, A.V., Engineer and Brudnyy, B.P., Engineer

Automatic Controller for the Operation of a High

TITLE Frequency Melting Furnace

PERIODICAL: Vestnik elektropromyshlennosti, 1960, No.12, pp.54-57

The fundamental parameter to be regulated is the power The natural power factor is inductive and equal to 0,1 to TEXT': To obtain the best output from the generator, a capacitive factor. power factor of the order of 0,9 is preferred. The correction of Switching the power factor is achieved by a battery of capacitors, in the capacitors has a significant effect on the voltage of the system, e.g. increasing the capacitance by 3% increases the It is therefore necessary to generator voltage by as much as 12%. The overall control the excitation current of the generator: scheme has three separate regulators: a power factor regulator, a voltage regulator with current limit and a circuit for automatically changing over the electrical connections to the The capacitors are arranged in 5 sets, the value of each set being twice that of the preceding one, It is thus Card 1/2

POLISHCHUK, YE.

Bruellov, Karl Pavlovich 1799-1852

Eminent Bussian Artist. Mol. kolkh. 19, no. 6, 1952

Monthly List of Russian Accessions, Library of Congress August 1952 UNCLASSIFIED

SHISHKIN, I. I.; POLISHCHUK, YE.

Painters

Rabotnitsa 31, No. 3, 1953.

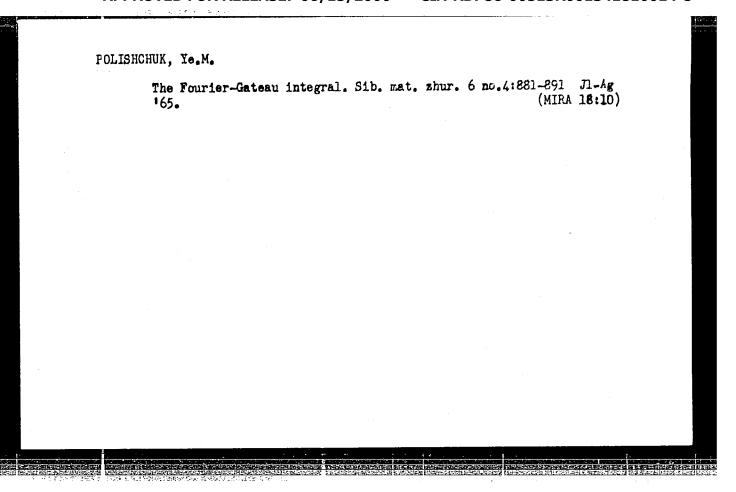
So: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

PETROV, V.V.; KOVAN'KO, A.G.; TSEYTIN, G.; POLISHCHUK, Ye.

Corrections to the article "Method of least squares and its extremal properties" (U.M.B. 9 no.1, 1954, p.41-62). Usp. mat. nauk 11 no.2:250-251 Mr-Ap '56. (MLRA 9:8)

(Least squares)

76. Stratonovich, R. L. On the Final Probabilities of Continuous Conditional Markov Processes  75. Frolov, A. S., and N. N. Chentsov. Use of Dependent Tests in the Monte Carlo Method for Obtaining Smooth Curves  86. Eydel nant, M. I. On the Publication of Tables of a Hypergeometric Distribution  SYMPOSIUM ON DISTRIBUTIONS IN INFINITE-DIMENSIONAL SPACES  81. Polishchuk, Ye. M. Normal Distribution and Laplace and Poisson Equations in a Hilbert Space  82. Sazonov. V. V. Some Remarks on Characteristic Functionals	77.	Mitrofanova, N. M. On a Nonparametric Problem of Mahalanobis	409
75. Frolov, A. S., and N. N. Chentsov. Use of Dependent Tests in the Monte Carlo Method for Obtaining Smooth Curves  80. Eydel nant, M. I. On the Publication of Tables of a Hypergeometric Distribution  SYMPOSIUM ON DISTRIBUTIONS IN INFINITE-DIMENSIONAL SPACES  81. Polishchuk, Ye. M. Normal Distribution and Laplace and Poisson Equations in a Hilbert Space  82. Sazonov. V. V. Some Remarks on Characteristic Functionals	F 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Statement of R. T. On the Final Probabilities of	411
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8. Polishchuk, Ye. M. Normal Distribution and Laplace and Poisson Equations in a Hilbert Space  82. Sazonov. V. V. Some Remarks on Characteristic Functionals	80.	Eydel nant, M. I. On the Publication of Tables of a Hypergeometric Distribution	439
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of Generalized Measures Card 16/17		Sazonov, V. V. Some Remarks on Characteristic Functionals of Generalized Measures	449



		\$/041/63/015/001/001/0 B187/B102	09
AUTHOR:	Polishehuk, Ye. M. (Leningrad)		
TITLE:	Differential equations with fur	ctional parameters	
PERIODICAL:	Ukrainskiy matematicheskiy zhur		13-24
TEXT: The	author studies a differential equiv $y^{(m)} = f(t, y', \dots, y^{(m-1)}) \varphi(x_1(t), \dots$	eation of the form $(1)$	4
concerning	ndependent and $y(t)$ as dependent as f and $\varphi$ and their derivatives definiteness, boundedness and con $y = Y[x_1, \dots, x_p; t]$ of (1) i	variables. With respect	ade
that if the differentia	conditions postulated are fulfil	led, and if $\phi$ satisfies	the
	$\sum_{n=1}^{p} a_n \frac{\partial^2 \phi}{\partial x_n^2} = 0$	(A)	
with consta	it a, then the integral $Y \begin{bmatrix} x_1, \dots \\ x_n \end{bmatrix}$	,x;t] of the equation	n (1)
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Differential equations with ...

S/041/63/015/001/001/009 B187/B102

when the  $x_g(t)$  are varied in admissible domains  $G_g$ , considered as the function of the  $x_g(t)$ , satisfies a functional equation:

 $\sum_{s=1}^{\infty} a_s \Delta_s Y = 0$ . Here  $\Delta_s$  denotes a partial Laplace functional operator

with respect to the function  $x_g$ . This theorem is extended so that the differential equation (A) also comprises terms of the first order. If Y[x;t] is an integral of an equation of the form:

 $y^{(m)} = f_1(t, y, y', \dots, y^{(m-1)}) x(t) + f_2(t, y, y', \dots, y^{(m-2)})$ (9)

then, with variation of x in the domain G, Y satisfies the functional equation  $\triangle Y = 0$ , i.e., to each t it is a functional harmonic with respect to x. As an example it is shown that the functionals  $\widetilde{\mathbb{R}}[x;t]$  and  $\widetilde{\mathbb{S}}[x;t]$  are harmonic for the integrals of the Ricatti and Schwarz differential equations

 $R' + R^2 = x(l),$  (10)  $\left(\frac{S'''}{S'} - \frac{3}{2}\left(\frac{S'}{S'}\right)^2 = x(l).$  (11)

It is proved that if the function  $\varphi$  satisfies the equation Card 2/3

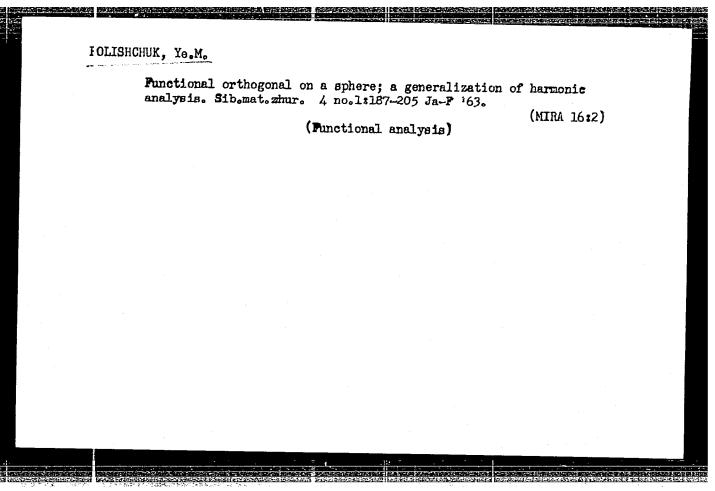
Differential equation $ \sum_{s=1}^{D} a_s \frac{\partial^2 \phi}{\partial x_s^2} + \lambda \phi = 0, $ equation	ons with  then the functions $a_{g} \triangle_{g} Y + \lambda Y = 0  \text{with}$	S/041/63/015/00 B187/B102 1 Y [x <sub>1</sub> ,,x <sub>p</sub> ;t]	goti-a:	
the Laguerre function	tisfy this equation and (Ye.M. Polishchuk.	are also found in the		
	, Vil'nyus, 1962, 427 per 29, 1960	o Vsesoyuzn. sovesho	haniya po	
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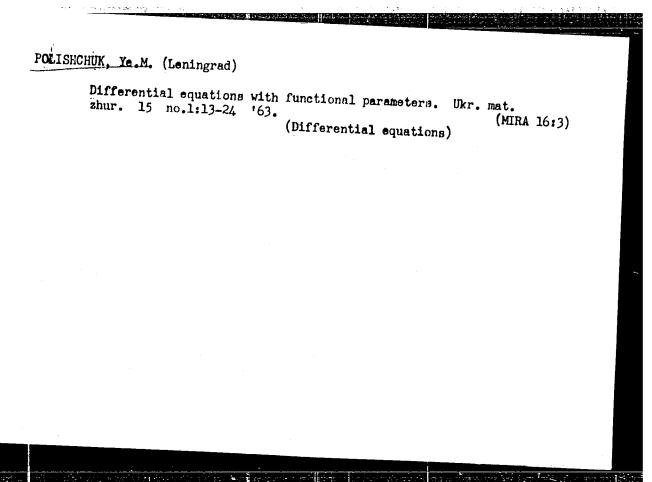
ENT(1)/EWI(m)/EWP(j)/I ACC NR AP6014528 UR/0199/65/006/006/1322/1331 SOURCE CODE: AUTHOR: Polishchuk, Ye. M. ORG: none TITLE: Functional analogs of thermal conductivity equations SOURCE: Sibirskiy matematicheskiy zhurnal, v. 6, no. 6, 1965, 1322-1331 TOPIC TAGS: Hilbert space, initial value problem, boundary value problem, Volterra equation, integral equation, Laplace equation, Poisson equation ABSTRACT: It is shown that the basic classical problems of the theory of thermal conductivity with initial and boundary conditions correspond to the dual problems for the equations  $\Delta u = 0$ ,  $\Delta u = Q$  in a functional space. This work is a continuation of earlier work of Ye. M. Polishchuk (O funktsional'nom laplasiane i uravneniyakh parabolicheskogo tipa, Uspekhi matem. nauk, 19, No. 2 (1964), 30-38). The first problem is that of finding a set of functionals H/x|R/ which satisfies the conditions a)  $\Delta H = 0$  when  $x \in G$ ;  $\lim H[x|R] = \omega_1(R).$  $x \mid \theta$  $\beta) \lim H[x|R] = \omega_2(R)$ Card 1/3 UDC: 513.881

at any fixed R (0 < R <  $\omega$ ). The problem is soluble, and B/Z/I can be represented as  $H[x|R] = \int_0^b du \int_0^T \frac{\varphi(\tau)}{2k\sqrt{\pi}(T-\tau)^{\gamma_h}} x(u) \exp\left(-\frac{x^2(u)}{4k^2(T-\tau)}\right) d\tau - \int_0^b du \int_0^T \frac{\psi(\tau)}{2k\sqrt{\pi}(T-\tau)^{\gamma_h}} (x_0(u)-x(u)) \exp\left(-\frac{(x_0(u)-x(u))^2}{4k^2(T-\tau)}\right) d\tau,$   $T = T[x] = 1/2(R^2 - ||x||^2),$   $k^2 = (b-a)^{-1},$ where  $\varphi$ ,  $\psi$  are continuous functions which are a solution of a system of Volterra integral equations with kernels that are functions of the difference between the independent variables and which have singularities of order  $(\tau - \tau)^{-3/2}$ . The second problem is to find a set of functionals H/X/R/ which satisfies the conditions

a)  $\Delta H = 0, x \in G$ ;  $\beta_0$   $\lim_{t \to 0} H[x|R] = \omega_1(R)$ ;  $\beta_0 \lim_{t \to 0} H[x|R] = \omega_1(R); \quad \forall H[x|R] = 0 \text{ the problem can be represented as}$ 

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where $\varphi$ , $\psi$ are fu	$H = \int_{a}^{b} du \int_{0}^{T} \frac{\varphi(\tau)}{2k\sqrt{\pi}(T-\tau)} + \int_{a}^{b} du \int_{0}^{T} \frac{f(\tau)}{\sqrt{\pi}\sqrt{T-\tau}} ex$ inctions which are a solutions of the districtions of the districti	$p\left(-\frac{(x_0(u)-x(u))^2}{4k^2(T-\tau)}\right)$	$d\tau$ ,	. 0
be extended in	nctions which are a solutions of the districtions of the districtions of order (t - less to the examination of us directions. Orig. a DATE: 03Jul64/ ORIG	$(t-\tau)^{-1/2}$ and $(t-\tau)^{-1/2}$	Political I. Wa	tions ariables of the olems can
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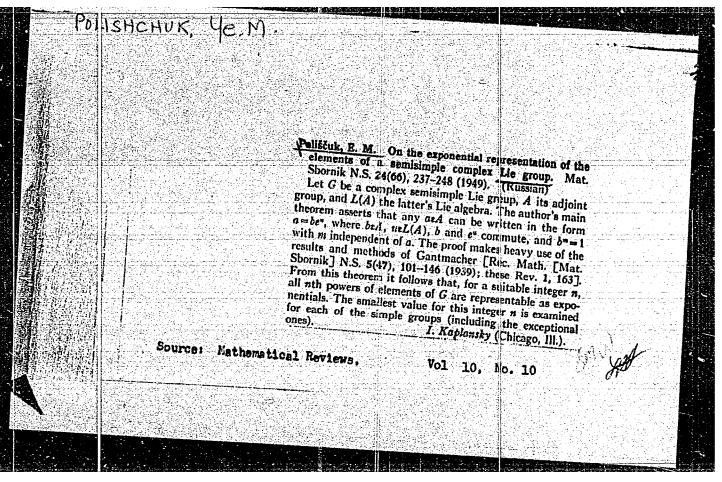


POLISHCHUK, Ye. M.

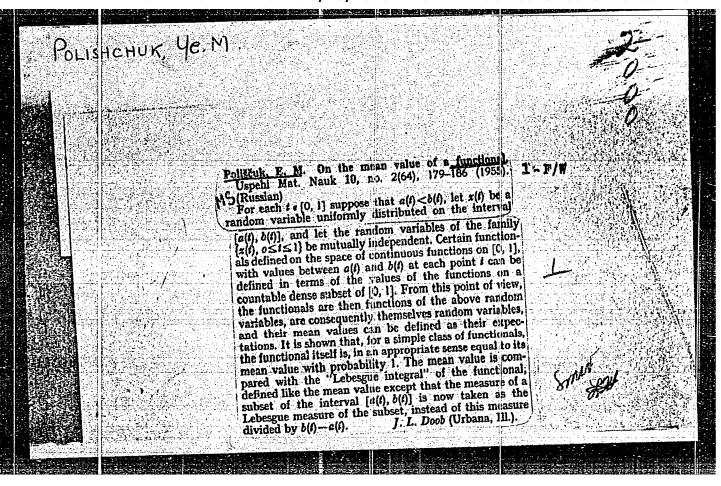
"The Exponential Representation of the Elements of a

Semi-Simple Complex Lie Group," Matemat. Sbor., 24,

No. 2, 1949. Vladivostok, -c1947-.



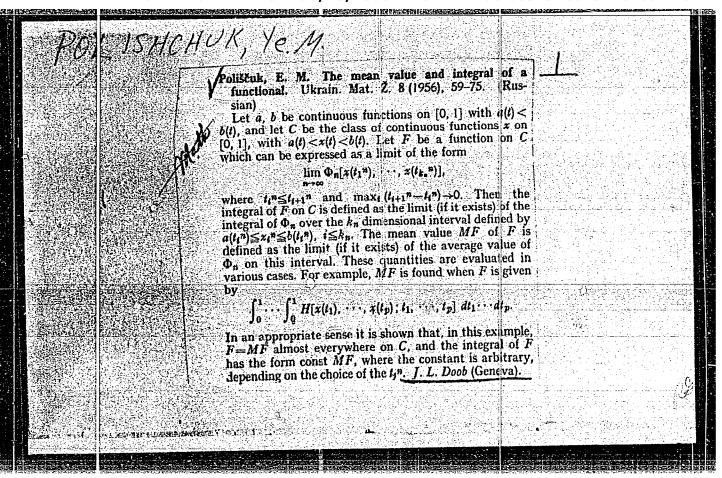
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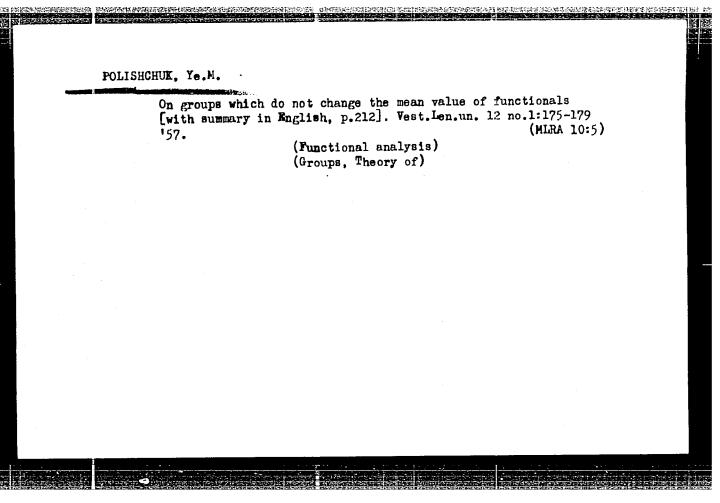


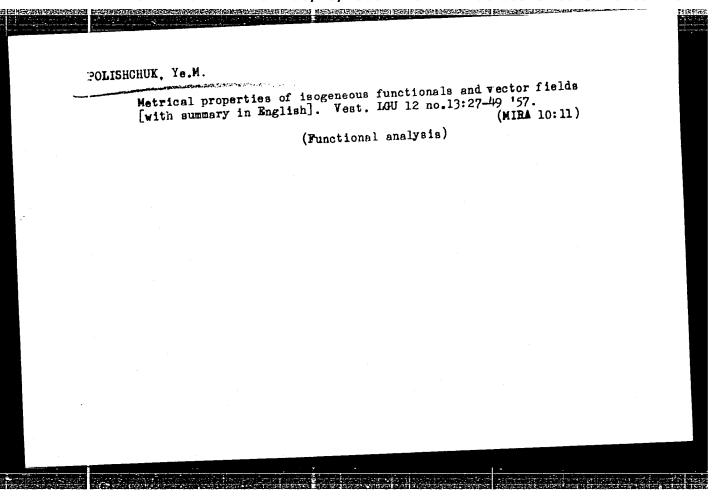
POLISHCHUK, Ye.M.

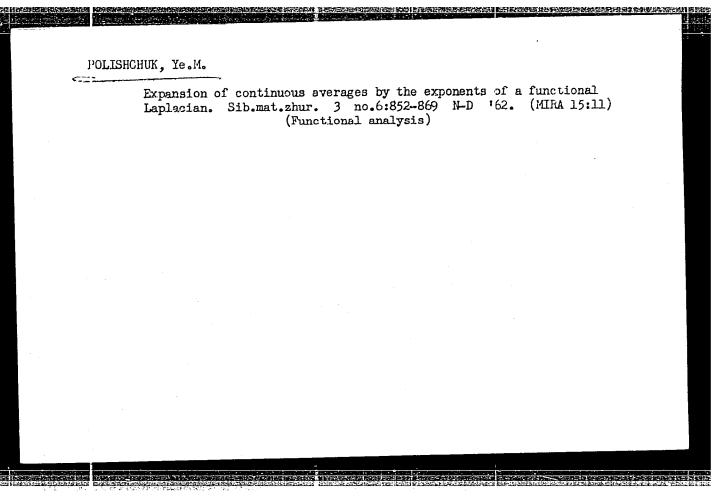
The functional Laplacian and parabolic equations. Usp.mat. nauk 19 no. 2:155-162 Mr-Ap '64.

Linear equations in functional Laplacians. Ibid.:163-170 (MIRA 17:6)









ACCESSION NR: AP4031755

s/0042/64/019/002/0155/0162

AUTHOR: Polishchuk, Ye. M.

TITLE: The functional Laplacian and parabolic equations

SOURCE: Uspekhi matematicheskikh nauk, v. 19, no. 2, 1964, 155-162

TOFIC TAGS: functional Laplacian, parabolic equation, Laplace operator, Brownian motion, spherical averaging, Laplace equation, Poisson equation

ABSTRACT: Functional Laplacians are continuous analogs of the Laplace operator in finite-dimensional spaces. The author uses continuous spherical averaging for solving the boundary value problems in this paper. He shows that Laplace and Poisson equations in functional space

 $\Delta F = 0, \qquad (1)$ 

 $\Delta F = Q, \qquad (2)$ 

are closely related to parabolic equations in finite-dimensional spaces. Hence he obtains a new and very simple method for solving the boundary value problems for (1), (2). The boundary value problem for (1) is analogous to the heat equation

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$\frac{\partial f}{\partial t} = \Delta f \text{ in problem in L} in L_2,  the i inhomogeneous illustrative the sum of a specific condition of the specific condi$	the unbounded span- corresponds a di inverted heat equation consists in the function in absolutely and unique (x(u),u)du, and the	ion. The same is responds to it is al F on the set V niformly converging the generating func	ables $x_1, \dots, x_n$ .  In in $E_n$ , and to the true for (2), excens $E_n$ . The following can be represented any series $F = \sum_{n=1}^{\infty} F_n$ , otions $g_n(\mathcal{E}_n, u)$ of	e interior problem ept that the ng theorem is i in the form of where the functionals
$H_n[x]$	$= \left(\frac{2\sqrt{\pi T[x]}}{2\sqrt{\pi T[x]}}\right) \left\{ \cdots \right\}$	$du_1 \ldots du_n \int_{-\infty} \ldots \int_{-\infty} g$	$(q_n, \text{ then the funo})$ $(\xi_1, \dots, \xi_n; u_1, \dots, u_n)$ $(\xi_1, \dots, \xi_n; u_1, \dots, u_n)$ $(\xi_n)^2$ $(\xi_1, \dots, \xi_n; u_1, \dots, u_n)$	.)× (3)
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ACCESSION NR: APh031756

AUTHOR: Polishchuk, Ye. M.

TITLE: Linear equations in functional Laplacians

SOUNCE: Uspekhi matematicheskikh nauk, v. 19, no. 2, 1964, 163-170

TOPIC TAGS: functional Laplacian, functional Laplace operator, nonlinear equation, entire function, Laplace equation, Poisson equation, harmonic functional ABSIRACT: Let  $\triangle$  be a functional Laplace operator,  $P_1, \ldots, P_m$ , Q be given functionals, and let F be an unknown functional. Let capital letters generally denote functionals, small letters — their arguments, in square brackets. It can be shown that functionals satisfying equations of the form  $A^m F + P_1[z] A^{m-1} F + \ldots + P_m[z] F = Q[z]. \tag{1}$ arise in very different areas of analysis, e.g., the theory of nonlinear differential and integral equations, the theory of entire functions. The author uses the

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operations MS and MV (defined in the paper) in his constructions; they yield

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operations, hequations and functionals a	e shows the can be red as arbitrary	at (1) is a duced to the y constants obtained fr	on equations in malogous to line in one, very and the operation the general meral solution	near ordinary special case tion ) as with the hel	differenti . He uses l quadraturé.	harmonic	
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	Δ <b>**</b> F	$F + \Gamma_1 \Delta^{m-1} F +$	$\dots + \Gamma_m F = 0$	- (2)	ilbert spec	e related	:
	Δ**F	$F + \Gamma_1 \Delta^{m-1} F + \Gamma_2 \Delta^{m-1} F$	$\dots + \Gamma_m F = 0$ in a particular	- (2)	ilbert spec	e related	•
where [] are	Δ*F harmonic : of the char	$F + \Gamma_1 \Delta^{m-1} F + \Gamma_2 \Delta^{m-1} F$ functions,	$\cdots + \Gamma_m F = 0$ in a particular equation	(2)		e related	
where [] are	Δ**F harmonic : of the char	$f + \Gamma_i \Delta^{m-1} F + \Gamma_i \Delta^{m-1} F$ functions, racteristic $\lambda^m + \Gamma_i \lambda^m$	$\dots + \Gamma_m F = 0$ in a particular	(2)		e related	
where [] are to the roots	harmonic : of the char the character is	$f + \Gamma_i \Delta^{m-1} F + \Gamma_i \Delta^{m-1} F$ functions, racteristic $\lambda^m + \Gamma_i \lambda^m$	$\cdots + \Gamma_m F = 0$ in a particular equation	(2)		e related	

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Isogeneity and Riemannian Metrics

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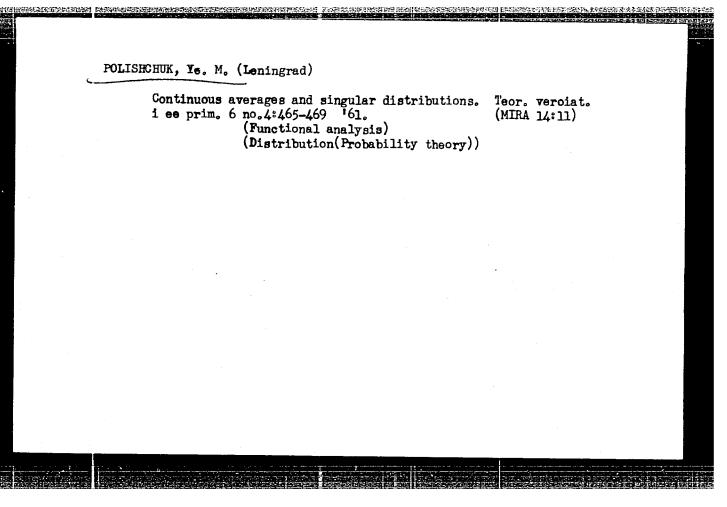
tensors. If  $d\Phi = fdF$ , where f is a complex scalar field in  $E_r$ , then F and  $\phi$  are called isogenic and f is called derivative  $\frac{d\Phi}{dF}$ . According to  $\sqrt{\text{Ref 5}}$  the author gives a geometric interpretation of the modulus **9** and the argument  $\varphi$  of  $\frac{d\varphi}{dt}$ , in which **9** is understood as a homothety coefficient, and  $\phi$  as a rotational angle of certain fields of pairs of conjugated orthogonal vectors in certain Riemannian spaces. Differential invariants of these spaces are given.

There are 5 references, 1 of which is Soviet, 1 Swedish, 1 Italian,

1 French, and 1 English.

SUBMITTED: October 11, 1957

(ard 2/2



POLISHCHUK, Ye.M.

Functional analogs of the heat conductivity equation.
Sib. mat. zhur. 6 no.6:1322-1331 N-D '65.

(MIRA 18:12)

8(0)

SOV/112-59-2-3225

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 2, p 142 (USSR)

RECENT THE PROPERTY OF THE PRO

AUTHOR: Polishchuk, Ye. S.

TITLE: Influence of Circuit Parameters of an Electrodynamic Phase Meter Upon Its Scale Shape and the Restoring Torque Gradient (Vliyaniye parametrov skhemy elektrodinamicheskikh fazometrov na formu shkaly i udel'nyy ustanavlivayushchiy moment)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1957, Vol 22, pp 161-175

ABSTRACT: A basic relation is presented between the turning angle of the moving element of a phase meter and the latter's parameters. Influence of the instrument circuit parameters upon the type of its scale is considered. An expression for the restoring torque gradient is presented, and the influence of instrument circuit parameters upon the variation of this gradient along the Scale is demonstrated.

From the author's summary.

Card 1/1

NESTERENKO, A.D.; POLISHCHUK, Ye.S.

Effect of the shape of current and voltage curves on the readings of the three-coil electrodynamic phasemeters. Izv. KPI 26.457-462 '57. (MIRA 11:6)

l. Kafedra izmeritel'nykh ustroystv Kiyevskogo politeknnicheskogo instituta.

(Electric meters)

POLISHCHUK, Ye.S.

Errors from mutual inductance in electrodynamic phasemeters for in-

Errors from mutual inductance in electrodynamic phases of the creased frequency and methods of eliminating these errors. Izv. KPI 26:475-483 26:475-483 157. (MIRA 11:6)

1.Kafedra izmeritel'nykh ustroystv Kiyevskogo politekhnicheskogo instituta.

(Electric meters)

POLISHCHUK, Ye.S., Cand Tech Sci -- (diss) "Measuring the power coefficient at low and high industrial frequencies." Kiev, 1958, 16 pp with illustrations (Min of Higher Education UkSSR. Kiev Order of Lenin Polytechnic Inst. Chair of 'Measuring Devices') 150 copies. Bibliography at end of text (10 titles) (KL, 28-58, 107)

- 50 -

# CIA-RDP86-00513R001341810014-8 "APPROVED FOR RELEASE: 06/15/2000

POLISCHUE, Ve.S.

Polishchuk, Ye.S., Engineer. AUTHOR:

94-1-5/24

TITLE:

Errors in the Determination of Power Factor of a Threephase Circuit by the Two-wattmeter Method (Pogreshnosti pri opredelenii koeffitsiyenta moshchnosti trekhfaznoy tsepi

po pokazaniyam dvukh vattmetrov)

PERIODICAL: Promyshlennaya Energetika, 1958, pp. 13 - 14 (USSR)

The two-wattmeter method of determining power-factor is inaccurate unless the load is symmetrical. Formulae for the ABSTRACT: error are derived from the basic equations of the method, The equivalent expressed in terms of symmetrical components. phase-displacement of an asymmetrically-loaded three-phase circuit is the phase-displacement of the star components of direct phase-sequence voltage and current. The formulae depend on the absolute degree of asymmetry and the measured value of the power-factor and also on the phase-displacement between the direct- and reverse-sequence components. Relations between the errors and the measured phase-displacement plotted for various degrees of asymmetry in Fig. 1 are in good correspondence with curves obtained experimentally. If the currents are asymmetrical, the power-factor error can be considerable. There are 2 figures and 1 Russian reference.

Card1/2

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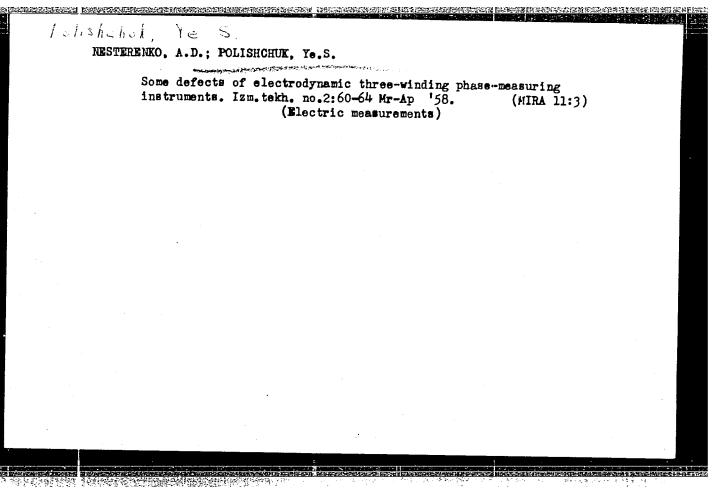
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POLISHCHUK, Ye.S., inzh.

Errors from indirect methods of measuring the power factor and phase-shift angle. Izv. vys. ucheb. zav.; energ. no. 1:76-79 Ja 158.

(MIRA 11:7)

1. Kiyevakiy ordena Lenina politekhnicheskiy institut. (Electric engineering)



AUTHOR:

Polishchuk, Ye.S.

SOV/21-58-2-16/28

TITLE:

On the Choice of an Electrodynamic Phasometer Circuit for Raised Frequencies (K vyboru skhemy elektrodinamicheskikh fazometrov dlya povyshennykh chastot)

PERIODICAL:

Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 2,

pp 183-185 (USSR)

ABSTRACT:

The main disadvantage of two-frame electrodynamic phasometers, which complicates their application at raised frequencies, is the presence of high additional moments from the mutual inductance which leads to considerable errors. These errors can be reduced by the proper choice of parameters of a phasometer circuit or by the use of threeframe phasometer circuits where the error becomes insignificant. Moreover, the readings of a three-frame phasometer depend only slightly, within certain limits, on the shape of the current and voltage curve and on the frequency fluc-

Card 1/2

507/21-58-2-16/28

On the Choice of an Electrodynamic Phasometer Circuit for Raised Frequencies

tuations of the investigated circuits. There are 3 circuit

diagrams and 1 Soviet reference.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic

Institute)

PRESENTED: By Member of the AS UkrSSR, K.K. Khrenov

SUBMITTED: April 15, 1957

NOTE: Russian title and Russian names of individuals and insti-

tutions appearing in this article have been used in the

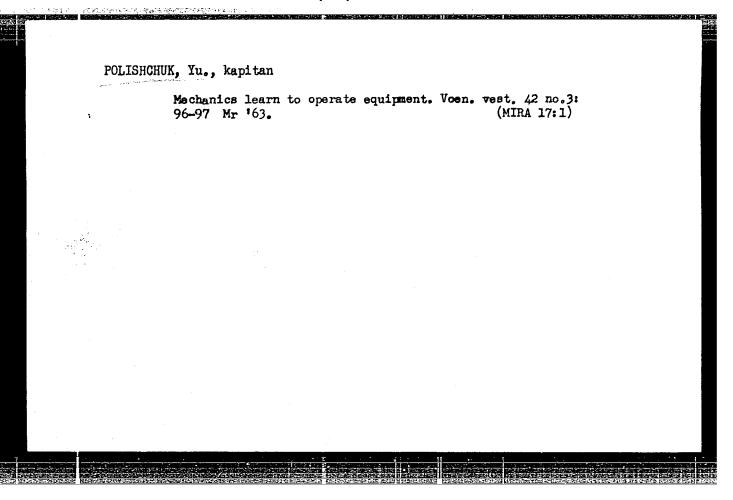
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	9(6)	SOV/146-2-5-8/19
	AUTHORS:	Ornatskiy, P.P., Candidate of Technical Sciences,  Docent; Ogorelin, M.A., Engineer; Polishchuk,  Ye.S., Candidate of Technical Sciences; Gnatyuk,  V.S., Engineer
	TITLE:	A Miniature Monophase Ferrodynamic 1.5 Class Phase  Meter 5
	PERIODICAL:	Izvestiya vysshikh uchebnykh zavedeniy, Priborostroyeniye, 1959, Nr 5, pp 54-57 (USSR)
	ABSTRACT:	With the cooperation of the "Tochelektropribor" Plant a portable phasemeter was developed by the Chair of Measuring Devices at the Kiyev Polytech- nic Institute Order of Lenin. The device is illu- strated by a diagram (Figure 1) and a photograph (Figure 3), and the authors discuss its working principle and design. Errors due to temperature changes of -10°C and frequency variations of -2% do not exceed 1.5%. This phasemeter was demonstrated at the International Exhibition in
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Name of	Car la reconstruction	

POLISHCHUK, Ye.S.; NESTERENKO, A.D.

Basic characteristics of electromechanical phasemeters. (MIRA 14:5)
no.6:41-44 Je '61. (Electric meters)



POLISHCHUK, Yu.1.; ROTSHTEYN, G.A., nauchnyy rukovoditel' raboty

Hebephrenic form of schizophrenia. Zhur. nevr. i psikh. 65 no.8:
1225-1231 '65.

1. Institut psikhiatrii AMN SSSR, Moskva.

GG/RM/WW EPF(n)-2/EWA(h)/EWP(j)/EWT(m)/T/EWA(l) I. 17717-66 SOURCE CODE: UR/0190/66/008/001/0026/0030 ACC NR: AP6003409 (A) AUTHORS: Uskov, I. A.; Tertykh, L. I.; Solomko, V. P.; Polishchuk, Yu. N. DRG: Kiev State University im. T. G. Shevchenko (Kiyevskiy gosudarstvennyy universitet); Institute of Physical Chemistry, AN UkrSSR (Institut fizicheskoy khimii AN UkrSSR) TITLE: Radiation polymerization of methylmethacrylate and styrene in the presence of mineral fillers SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 1, 1966, 26-30 TOPIC TAGS: radiation polymerization, styrene, methylmethacrylate, gamma ABSTRACT: Polymerization of styrene (I) and methylmethacrylate (II) in contact with mineral fillers (silica gel, kaolin, asbestos, glass fiber), inert under ordinary conditions, was studied for the reaction to 7-radiation. It was established that: 1) mineral fillers accelerate the polymerization process and increase molecular weight of homopolymer; 2) during ionization irradiation a grafted polymer is formed on the surface of the filler and held strongly by chemical bond forces; 3) with increased temperature, the yield of homopolymer and the UDC: 66,095.26+678.744+678.746 Card 1/2

s/073/63/029/003/006/009 A057/A126

Polishchuk, Yu. N., Korniyenko, T. P., Vysotskiy, Z. Z.

Polymerization of styrene, vinylacetate, and methyl methacrylate LUTHORS:

in the presence of alumo-silica gel coatings TITLE:

Ukrainskiy khimicheskiy zhurnal, v. 29, no. 3, 1963, 325 -329

Polymerization kinetics of the radical polymerization in liquid PERIODICAL:

phase were studied with styrene, vinylacetate, and methyl methacrylate in reaction vessels with alumo-silica gel coatings. Also investigated was the effect of xerogels, formed in vapors of the investigated monomer, and the struc-TEXT: ture-adsorptive and catalytic properties were compared with control samples. The present work was carried out in the Institut finicheskoy khimii im. L. V. Pisarzhevskogo (Institute of Physical Chemistry imeni L. V. Pisarzhevskiy) in continuation of earlier investigations (Ukr.khim.zhur., v. 28, 1962, 1024) with non-porous coatings. The hydrogel was prepared in the usual manner forming alumosilic acid. Thus the alumo-silica gel surface showed properties of a strong acid. The process with monomer vapors resulted after drying in a yellow-

Card 1/3

Polymerization of styrene,...

S/073/63/029/003/006/009 A057/A126

brown product in case of styrene, in a black product with vinylacetate, and in a colourless product with methyl methacrylate. Adsorption isotherms of methanol vapors on the alumo-silica gel samples treated with styrene or vinylacetate show two characteristics: both curves lie below the control curve and have reproducible hysteresis loops. This is explained by the change of the xerogel surface effected by grafting of polymer chains to it. Thus, a polystyrene skeleton is formed in the pores of the gel. The adsorption isotherm of the methyl methacrylate alumo-silica gel lies above the control sample curve. This difference to the other two samples is in agreement with the colour difference observed, showing thus a connection between the two effects. The prepared alumo-silica gels were applied, powdered (100 - 250  $\mu$ ) and mixed with water glass, to the inner surface of the reaction vessel. The polymerization was carried out with 1% benzoyl peroxide admixture in nitrogen atmosphere. The technique used was described in an earlier paper (Zh. fiz. khim., v. 25, 1951, 647). A strong effect of the drying method of the alumo-silica gel on styrene and vinyl acetate polymerization kinetics was observed. This effect was especially pronounced for alumo-silica gel coatings dried over CaCl2 in the monomer vapor. The styrene polymerization is initiated at 85°C, that of vinyl acetate above 65°C.

Card 2/3

S/073/63/029/003/006/009

Polymerization of styrene...

No effect could be observed in methyl methacrylate polymerization, except a shortening of the induction period. The obtained results prove the assumption of the heterogeneous-homogeneous mechanism of the process studied. However, the expected specific polymerization of the monomer effected by the alumo-silica gel was not observed. This effect is apparently restrained by the change of the hemical nature of the surface because of the intensive polymerization occurring on the alumo-silica gel surface. There are 4 figures.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo (Institute of Physical Chemistry im. L. V. Pisarzhevskiy)

SUEVITTED: January 4, 1962

3/0021/64/000/005/0607/0609

ACCESSION NR: AP4037445

AUTHOR: Polishchuk, Yu. N.; Korniyenko, T. P.; Zelenchukova, T. G.; Polyakov,

TITLE: Effect of a solid surface Tof additives in suspension on the radiation-

induced polymerization of vinyl compounds

SOURCE: AN UKTRSR. Dopovidi, no. 5, 1964, 607-609

TOPIC TAGS: vinyl, vinyl polymer, vinyl polymerization, radiation-induced polymerization, ionizing radiation, radiation effect, styrene polymerization, gamma-radiation, cobalt-60 source, gamma-ray-induced polymerization, free-radical polymerization, silica gel, MgO2ZnO

ABSTRACT: The effect of suspended solid additives on gamma-radiation-induced polymerization of styrene was investigated at room temperature. A Cool source with 1600 g equivalent activity was used. The data showed that in the case of free-radical polymerization of styrene, the very same additives were active that, according to the literature, increase the rate of radiation-induced poly-

Card 1/2

8/0000/63/000/000/0156/0159

ACCESSION NR: AT4020706

AUTHOR: Polishchuk, Yu. N.; Korniyenko, T. P.; Polyakov, M. V. TITLE: Radiation-induced polymerization of styrene in the presence of solid additives

SCURCE: Karbotsephy\*ye vy\*sokomolekulyarny\*ye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 156-159

TOPIC TAGS: radiation polymerization, styrene, silicagel, zinc oxide, aluminum

silicate, quartz, titanium dioxide, vanadium pentoxide, metallic magnesium, activated charcoal, polymerization catalyst

ABSTRACT: The polymerization of styrene under the influence of Y-rays in the presence of solid additives such as silicagel, zinc oxide, aluminum silicate, activated charcoal, quartz, titanium dioxide, vanadium pentoxide and metallic magnesium was investigated at room temperature. On the basis of polymer yields, the important role of the solid additives in the initiation of the polymer chains was demonstrated. This makes it possible to assume a hetero-homogeneous mechanism for the radiation polymerization of styrene under the conditions investigated. An analogy was observed between the action of some solid additives on ionic radiation polymerization and on the radiation polymerization of styrene proceeding at room temperature. The polymer yields and molecular weights are given for additive

Card 1/2

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CCESSION NR: AT4020706  oncentrations of 10-50% (by working the polystyrene yield is also p	eight of styrene), at an irr	radiation dose of	3.5 x 10 <sup>20</sup> e.v./g. o 80 hours).	
oncentrations of 10-50% (by work the polystyrene yield is also parts. has: 3 tables and 1 ASSOCIATION: Institut fiziches are physical Chemistry, AN II	lotted against the polymer figure.	sarzhevskogo AN	UkcrSSR(Institute	
ASSOCIATION: Institut fiziche of Physical Chemistry, AN U	crssr)	.04	ENCL: 000	
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POLISHCHUK, Yu.N.; KORNIYENKO, T.P. [Korniienko, T.P.]; ZELENCHUKOVA, T.G. [Zelenchukova, T.H.]; POLYAKOV, M.V.

Effect of a solid surface on the radiation-induced polymerization of vinyl compounds. Dop. AN URSR no.5:607-609 '64. (MIRA 17:6)

1. Predstavleno akademikom AN UkrSSR A.I. Brodskim [Brods'kyi, 0.I.].

POLISHCHUK, Yu.N.; KORNIYENKO, T.P.; POLYAKOV, M.V.

Role of the reaction vessel walls in the process of initiated polymerization of styrene. Ukr.khim.zhur. 28 no.9:1024-1030 (MIRA 15:12) 162.

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo
AN UkrSSR. (Styrene) (Polymerization) (Chemical reactors)

POLISHCHUK, Yu.N.; KORNIYENKO, T.P.; VYSOTSKIY, Z.Z.

Polymerization of styrene, vinyl acetate, and methyl methacrylate in the presence of aluminosilica gel coatings. Ukr.khim.zhur. 29 no.3:325presence of aluminosilica gel coatings. (MIRA 16:4)
329 163.

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo.
(Polymerication) (Organic compounds) (Aluminosilicates)

S/073/62/028/009/003/011 A057/A126

AUTHORS:

Polishduk, Yu. N., Korniyenko, T. P., Polyakov, M. V.

TITLE:

On the effect of the walls of the reaction vessel on the process of initiated styrene polymerization

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 28, no. 9, 1962, 1024 - 1030

TEXT: At the Institut fizicheskoy khimii im. L. V. Pisarzhevskogo AN USSR (Institute of Physical Chemistry imeni L. V. Pisarzhevskiy AS UkrSSR) a detailed study was carried out on the benzoyl peroxide-initiated styrene polymerization study was carried out on the size of the reaction vessel and the surface of its kinetics in dependence of the size of the reaction vessel and the surface of its walls. The polymerization was investigated by measuring the temperature rise of walls. The polymerization under nearly adiabatic conditions. Glass ampullas the reactants during reaction under nearly adiabatic conditions. Glass ampullas of 8 cm length and different diameters from 12 to 30 mm were used as reaction vessels. Experiments carried out at 85, 90, and 98°C in molybdenum glass vessels showed a considerable increase in the polymerization rate with an increase sels showed a considerable increase in the polymerization rate with 24 mm diameter at temperatures below 98°C showed the shortest induction period and maximum eter at temperatures below 98°C showed the shortest induction period and maximum

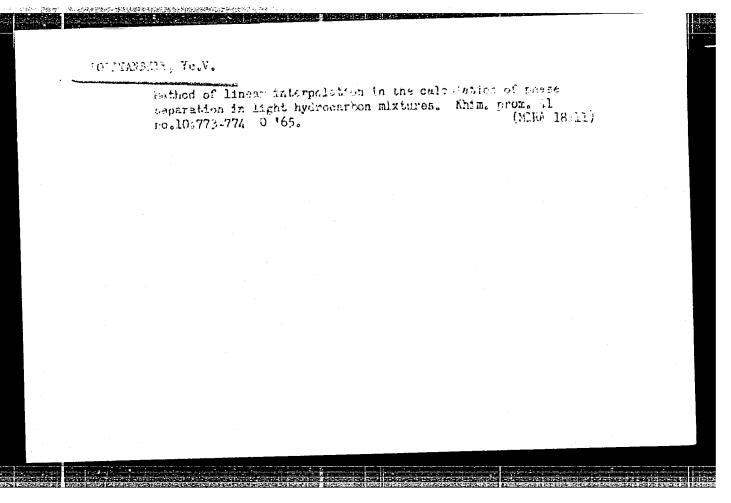
Card 1/2

DAVTYAN, O.K.; MANAKIN, B.A.; MISYUK, E.G.; POLISHCHUK, Yu.N.

Mechanism of oxidation, hydrogenation, and electrochemical combustion on solid catalysts. Part 3: Relation between depolarizing oxides on carbon and platinum and the catalytic effect of the latter in the

oxidation of SO<sub>2</sub>. Zhur.fiz.khim. 35 no.6:1186-1191 Je '61. (MIRA 14:7)

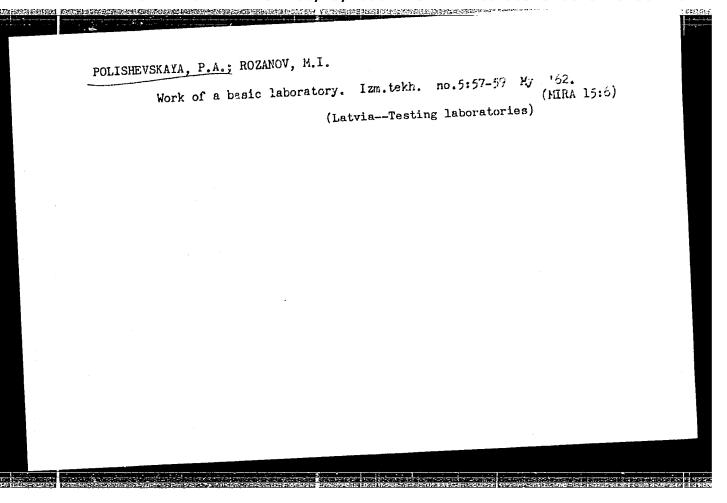
1. Odesskiy gosudarstvennyy universitet imeni I.I.Mechnikova, kafedra fizicheskoy khimii.
(Electrochemistry) (Gatalysts)



POLISHCHUK, Z.K.; KIRILLOV, S.P.; DROZDOV, V.M.

Concerning B.P. Barkhatov's note "Hasty conclusions on lower Faleozoic stratigraphy of the Pamirs." Izv. Otd. geol.-khim. i tekh. nauk AN Tadzh. SSR no.1:129-132 '59. (MIR' 14:8)

(Pamirs-Geology, Stratigraphic) (Barkhatov, B.P.)



Improve the utilization of agricultural machinery and tractors.

Improve the utilization of agricultural machinery and tractors.

(MIRA 13:10)

(Agricultural machinery)

(Tractors)

PCLISHKIN, A.A., prepodavatel Increase the productivity of the SK-2,6 combine. Mekh. sil .hosp. (MIRA 14:6 (MIRA 14:6) Melitopol'skiy institut mekhanizatsii sel'skogo khozyaystva. (Combines (Agricultural machinery))

> CIA-RDP86-00513R001341810014-8" **APPROVED FOR RELEASE: 06/15/2000**

ZEL'MAN, A.S.; POLISHKIN; A.A.; SHEPEL', N.M.

For accurate fueling of diesel tractors. Mekh. sil'. hosp. 12 no.9:19 S '61. (MIRA 14:11)

1. Melitopol'skiy institut mekhanizatsii sel'skogo khozyaystva. (Diesel engines—Fuel systems)

What the over-all mechanized crews should be. Mekh. sil'. hosp.
12 no. 3:8 Mr '61. (MIRA 14:4)

1. Melitopol'skiy institut mekhanizatsii sel'skogo khozyaystva. (Farm mechanization)

POLISHVAYKO, I.Z.; DEMIDENKO, I.G.

Practices of collective farms in the use of fertilizers. Zemledelie (MLRA 18:10) 27 no.11:55-58 N '65.

1. Nachal'nik Upravleniya khimizatsii Ministerstva sel'skogo khozyaystva UkrSSR (for Polishvayko). 2. Glavnyy agronom Upravleniya khimizatsii Ministerstva sel'skogo khozyaystva UkrSSR (for Demidenko).

ACC NRI APGOUL973

(A,N)

SOURCE CODE: UR/0349/65/000/011/0055/0058

AUTHOR: Polishvayko, I. Z. (Chief); Demidenko, I. G. (Chief agriculturist)

CRG: Applied Chemistry Doard MSKh UKrSSR (Upravleniya khimisatsii MSKh UKrSSR)

TITIE: Experience of kolkhozes with fertilizers

SOURCE: Zemledeliye, no. 11, 1955, 55-58

TOPIC TAGS: fertilizer, agriculture crop

ABSTRACT: Ukraine SSR, which has considerable peat resources, plans to increase its yearly production of organic fertilizers to 180 to 200 million tons. In 1965 the kolkhozes and sovkhozes of the Ukraine received 5.5 million tons of mineral fertilizers representing an increase of 800,000 tons over the previous year. In Ukraine's forest zone grain, industrial and other crops are grown. In the forest steppe zone sugar beet, hemp, and vegetable crops are grown in addition to grain. In the steppe zone, where the precipitation is much less than in the forest and forest steppe zones, winter wheat, sunflower, corn and melon crops are grown. The greater part of the mineral and organic fertilizers is introduced during fall plowing. All crop yields have increased with the use of fertilizers. With the application of Nato Park to 6 centners/hectare in the forest zone, by 3 to 5 centners/hectare in the forest steppe zone, and by 4

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UDC: 631.8

centners/hectare in the steppe zone. Kolkhoz im. Zhdanov (L'vov Colast) and kolkhoz im Parkhomenko (Ternopol'sk Colast) are cited as models in the use of fertilizers and their crop production figures are given. Orig. art. has: 1 table.							
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POLICHVAYMO, M.N.: "A comparative study of the biological properties of the varieties of sainfoin cultivated in the right-bank forest stepse of the Ukraine". Belaya Tserkov', 1955. Belaya Tserkov' Agricultural Inst, Chair of Selection and Seed Paising. (Discertations for the Degree of Condidate of Agricultural Sciences)

SO: Knizhnaya letopis' No 44, 29 October 1955. Moscow.

BRUTUS, L., kand. ekon. nauk, glav. red.; ANTONS, R., red.; POLISINSKI, U., red.; KAGANOVITS, I., kand. ekon. nauk, red.; KULL, E., kand. ekon. nauk, red.; MUREL, R., red.; RANNIK, E., red.; VINT, E., kand. ekon. nauk, red.; RIIKOJA, L., red.; KOHU, H., tekhn. red.

[Economic life of Soviet Estonia, 1940-1960] Noukogude Eesti majandus, 1940-1960. Tallinn, Eesti Riiklik.Kirjastus, 1960. 478 p. (MIRA 16:6)

1. Eesti NSV Teaduste Akadeemia. Majanduse Instituut. 2. Chlenkorrespondent AN Estonskoy SSR (for Antons). (Estonia--Economic conditions)

### POLIS'KIY, N.M.

Diagnostic significance of the C/N coefficient in urine in malignant neoplasms. Medych.shur.24 no.3:86-90 '54 (MLRA 8:10)

1. Kiivs kiy medichniy institut, gospital na terapevtichna klinika, i Kiivs ka klinichna likarnya vodnykiv.

(NHOPLASMS, urine in, carbon-nitrogen ratio, diag.value)

(URINE, carbon-nitrogen ratio in neoplasms, diag.value)

(CARBON, in urine, carbon-nitrogen ratio in neoplasms, diag.value)

(MITROGEN, in urine, carbon-nitrogen ratio in neoplasms, diag. value)

YERMOLOV, L.S.; ISICHENKO, I.A.; POLISSKIY, A.Ya.; TROFINOV, V.L.; LAZARENKO, A.I., red.

[Repairing parts of SMD engines] Vosstanovlenie detalei dvigatelei SMD. [By] L.S.Ermolov i dr. Kiev, Urozhai, 1965. 377 p. (MIRA 18:2)

POLISSKIY, N. Ya.; MALOZHIPENKO, V. M.

Lathes

Restoration of tapered ways of a turnet lathe, Stan. i instr., 23, No. 7, 1952.

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